KENTON COUNTY

(Kenton County Water Service Area Map)

- Estimated 1999 population of 145,700--92% on public water
- Estimated 2020 population of 152,000--95% on public water
- 550 miles of water lines, with plans for 105 additional miles
- Estimated funding needs for public water 2000-2005--\$21,290,000
- Estimated funding needs for public water 2006-2020--\$5,340,000

Kenton County had an estimated population of 145,698 (57,430 households) in 1999 with a projected population of 152,000 (64,600 households) in 2020. Public water is provided to about 92 percent of the county's residents. In areas of the county not served by public water, about 10 percent of the households rely on private domestic wells and 90 percent rely on other sources. About 2,020 customers will be added to public water service through new line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
KENTON								,
Taylor Mill W/D	1.1	11	40					40
N. Kentucky W/D	10.6	252	400	3,000				3,400
Taylor Mill	3.0	45	150					150
Newport					3,000	5,700		8,700
Covington				5,000				5,000
Villa Hills				2,000				2,000
Bromley			·	1,000				1,000
Ludlow			·	1,000				1,000
Total	14.7	308	590	12,000	3,000	5,700		21,290

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/	Total
							Pumps	
	Miles	Number	Cost in \$1000	in \$1000				
KENTON								,
Taylor Mill W/D	1.0	15	40					40
N. Kentucky W/D	90.0	1,700	3,600				1,700	5,300
Taylor Mill								,
Total	91.0	1,715	3,640				1,700	5,340

PUBLIC WATER SYSTEMS

Kenton County has 7 public or semi-public water systems: 5 community--3 municipal, Ludlow Water Works, Taylor Mill Water Department, and Bromley Water Works; 1 water

WATER SERVICE AREAS KENTON COUNTY Kentucky

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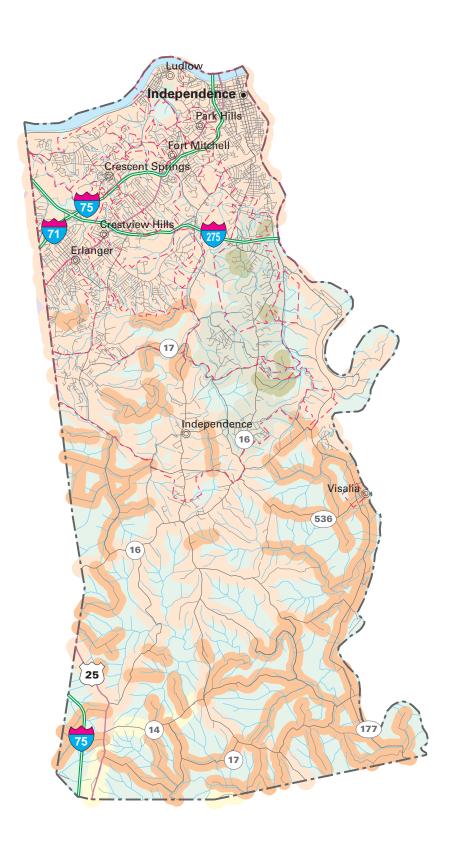




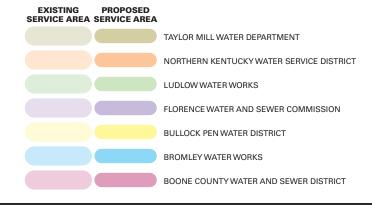




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WATER SERVICE STATUS BY OWNER



district, Northern Kentucky Water Service District; 2 private systems; and 1 non-community systems. A few customers in the county are also served by Boone County Water District, Bullock Pen Water District, and Florence Water and Sewer Commission.

BROMLEY WATER WORKS

PWSID:
System Type:
Owner Type:
Surface Source:
Purchase Source:NORTHERN KENTUCKY WATER SERVICE DISTRICT
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD):
Percent Daily Average Production:
Total Tank Storage Capacity (gallons):
Total Service Connections:
Number of Employees:
Treatment Operator Class:
Distribution Operator Class:
Customer Rate for 1,000 Gallons:Not available
O/M costs 1997:Not available
O/M costs per Service Connection:
Net Revenue 1997:Not available
Total Water Produced 1997 (gallons):Not available
Water Sold 1997 (gallons):
Unaccounted-for Water 1997 (%):

The City of Bromley purchases its water from the Northern Kentucky Water Service District. However, the city's master meter is not functional, so Bromley sends the meter readings from each house to NKWSD for billing calculation. Bromley serves 289 residential customers and 17 commercial customers. The city has no treatment, storage, or pumping facilities of its own. Fire hydrants are used for flushing the system. The water department staffs one full-time employee.

Bromley serves 99 percent of its population. It also serves a limited number of residences outside the city limits, but does not accept new customers outside the city. Bromley's primary water distribution problem stems from the aged nature of its infrastructure. The west side of town has 3/4inch pipes, which have chronically low or insufficient pressure. Because of the highly developed structure of Bromley at present, no significant future residential growth is anticipated; however, the aged system is in need of overhaul and update to adequately serve its citizenry.

NORTHERN KENTUCKY WATER SERVICE DISTRICT

PWSID:	
System Type:	COMMUNITY
Owner Type:	WATER DISTRICT
Surface Source:	OHIO RIVER
Purchase Source:	NEWPORT WATER DISTRICT
Well Source:	
Sells Water to:	WALTON WATERWORKS DEPARTMENT
Treatment Plant Capacity (MGD):	54.00
Percent Daily Average Production:	66.00
Total Tank Storage Capacity (gallons):	
Total Service Connections:	61,762.00
Number of Employees:	
Treatment Operator Class:	4D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:	2.44
O/M costs 1997:	13,460,508.31
O/M costs per Service Connection:	
Net Revenue 1997:	
Total Water Produced 1997 (gallons):	975,527,000.00
Water Sold 1997 (gallons):	
Unaccounted-for Water 1997 (%):	10.91

The Northern Kentucky Water Service District draws water for treatment from the Ohio River and the Licking River. The District has 40,532 service connections in Kenton County and 21,230 service connections in Campbell County, serving a population of approximately 200,000. It has 53,995 residential customers who used a total volume in 1998 of 4,023,840,4000 gallons, 3,297 commercial customers who used 1,717,084,500 gallons, and 95 industrial customers who used 585,145,500 gallons. The average daily production of the Northern Kentucky Water Service District's two water treatment plants was a combined 30,000,000 gallons per day in 1997. The District also purchases an average of 3,000,000 gallons per day from the Newport Water Department. The district also supplies the systems of the City of Bromley, the Ludlow Public Works, the City of Taylor Mill, Boone County Water District, City of Florence, Tri-Village Water, Pendleton County Water, and Walton Waterworks. There is a storage capacity of 269,500,000 gallons in 18 tanks located throughout the district.

The Northern Kentucky Water Service District is responsible for all of Kenton and Campbell Counties, excluding those incorporated areas that choose to be excluded. Within the past few years, the district has grown dramatically as it has assumed responsibility for new areas. Virtually all households in the northern, urban areas of Kenton and Campbell

Counties are served, albeit through very aged infrastructure. The rural, southern portions of these counties remain largely unserved. The district's big challenge within the next 20 years will be reaching those areas, which have population densities that appear startlingly low to a district accustomed to operating in the dense Kentucky portion of Cincinnati.

TAYLOR MILL WATER DEPARTMENT

PWSID:	0500424
System Type:Co	MIMUNITY
Owner Type:	MUNICIPAL
Surface Source:	
Purchase Source:NORTHERN KENTUCKY WATER SERVICE	E DISTRICT
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):	0.00
Percent Daily Average Production:	0.00
Total Tank Storage Capacity (gallons):	
Total Service Connections:	
Number of Employees:	8.00
Treatment Operator Class:	2D
Distribution Operator Class:	

Customer Rate for 1,000 Gallons:

O/M costs 1997:

Not available
O/M costs per Service Connection:

Not available
Net Revenue 1997:

Not available
Total Water Produced 1997 (gallons):

Water Sold 1997 (gallons):

Not available
Unaccounted-for Water 1997 (%):

Not available

The Taylor Mill Water Department purchases its water from the Northern Kentucky Water Service District. There is through-flow in the system with water entering in the north end of the city, and exiting back into the Northern Kentucky Water Service District's system on the south end of town. The District serves 4,031 customers who used 371,061,500 gallons last year. The District has no treatment or pumping facilities, but it does have a storage capacity of 325,000 gallons in a tank at Taylor Mill Elementary. The Taylor Mill Water Department has eight full time employees.

Almost all residents of Taylor Mill are already being served by city water. A few short extensions are planned to reach the most remote households.

LUDLOW WATER WORKS

PWSID:	
System Type:	
Owner Type:	MUNICIPAL
Surface Source:	

Purchase Source:NORTHERN KENTUCKY WATER	SERVICE DISTRICT
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):	0.00
Percent Daily Average Production:	0.00
Total Tank Storage Capacity (gallons):	0.00
Total Service Connections:	1,700.00
Number of Employees:	2.00
Treatment Operator Class:	2D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:	Not available
O/M costs 1997:	Not available
O/M costs per Service Connection:	Not available
Net Revenue 1997:	Not available
Total Water Produced 1997 (gallons):	Not available
Water Sold 1997 (gallons):	Not available
Unaccounted-for Water 1997 (%):	Not available

OTHER SYSTEMS

ROSEDALE MOBILE HOME PARK INC

Rosedale Mobile Home Park Inc is located in Kenton County. The system serves a population of 346 and has 105 service connections. The private, community system purchases water form the northern Kentucky Water District.

VISALIA ELEMENTARY SCHOOL

Visalia Elementary School is located in Kenton County. The system serves a population of 224 and has 1 service connection. The local, non-transient, non-community system has treatment capacity of 2,250 gallons per day and water is purchased from Northern Kentucky water Service District.

KENTON MARINA

Kenton Marina is located in Kenton County. The system serves a population of 40 and has 1 service connection. The private, transient, non-community system water is purchased from Rauh Water District. The charge for the first 5000 gallons of water was \$24.85.

PRIVATE DOMESTIC SYSTEMS:

About 11,500 people in the county rely on private domestic water supplies: 1,200 on wells and 10,300 on hauled water or other sources.

The alluvium along the Ohio River is the best source of ground water in the county. Many properly constructed drilled wells will produce several hundred gallons per minute from the alluvium, with most wells able to produce enough for a domestic supply at depths of less than 100 feet. Water is hard or very hard but otherwise of good quality.

In the Licking River valley and the lower sections of the larger creek valleys in Kenton County most drilled wells will produce enough water for a domestic supply at depths of less than 100 feet. Some wells located in the smaller creek valleys will produce enough water for a domestic supply except during dry weather. In the upland areas of Kenton County that encompasses approximately 60% of the county, most drilled wells will not produce enough water for a dependable domestic supply except along drainage lines that may produce enough water except during dry weather. Ground water in these areas is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.